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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/784,523

02/23/2004

Allan J. Kuchinsky

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EXAMINER

ZEMAN, MARY K

ART UNIT

PAPER NUMBER

1631

NOTIFICATION DATE

DELIVERY MODE

07/07/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

IPOPS.LEGAL@agilent.com

Office Action Summary	Application No. 10/784,523	Applicant(s) KUCHINSKY ET AL.	
	Examiner Mary K. Zeman	Art Unit 1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-29 and 51-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-29 and 51-58 is/are rejected.
- 7) ☒ Claim(s) 8, 58 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 1631, Examiner Mary K Zeman.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/29/09 has been entered.

Claims 1-7, 30-50 have been canceled. Claims 8-29, 51-58 are pending.

Claim Objections

Claims 8 and 58 are objected to because of the following informalities: "experimental data forma" in line 7 of claims 8 and 58 should read "experimental data format". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8-29 and 51-58 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amendment to claims 8 and 58 “in which the specific biological information is represented in local format objects in a canonical or abstract representation” appears to be new matter.

In the description of Figure 1, the specification discloses “Using a local format infrastructural layer 400 (as described in co-pending application Ser. No. 10/154,524 for example, knowledge from one representation (text, data or graphical) may be transformed to one or more other of the representations. This allows combining knowledge from different representations for comparison purposes, for constructing new and more detailed representations of knowledge, and the like. At the local format level 400 the knowledge is converted to a canonical or abstract representation. This abstract representation serves as a common language (local format) which can be used for textual representations, data representations and graphical representations of knowledge.”

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This indicates that the local format objects are *transformed* to a canonical or abstract representation- not that the local format object *is* the canonical or abstract representation. These are not synonymous concepts, and the specification appears to lack basis for this limitation..

The previous amendment to the claim 8 and presently in claim 58 stating that the data “are all representable in said local format and are exchangeable and useable together” also lacks basis in the originally filed specification and claims. The specification does not set forth that all the formats are exchangeable and usable together. The Examiner is unable to find support for the concept or wording that the formats are “exchangeable”.

Claims 8-29 and 51- 58 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims various “means for” clauses. The "means executable using said processor for selecting stencils" the "means for assigning specific biological data", "means for designing and saving", the “ means for modifying”, “ means for rule checking” means for overlaying, mapping, navigating, the “means for adding elements to a stencil on a canvas” , “means for merging” means for linking, annotating, comparing, etc. each lack *specific* related structures in the specification. No specific computer or software structures for performing these means are disclosed. See MPEP 2181: 35 U.S.C. 112, sixth paragraph states that a claim limitation expressed in means-plus-function language “shall be construed to cover the corresponding structure...described in the specification and equivalents thereof.” “If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure,

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the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112.” In *re* Donaldson Co., 16 F.3d 1189, 1195, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) (in banc)... Whether a claim reciting an element in means- (or step-) plus-function language fails to comply with 35 U.S.C. 112, second paragraph, because the specification does not disclose adequate structure (or material or acts) for performing the recited function is closely related to the question of whether the specification meets the description requirement in 35 U.S.C. 112, first paragraph. See *In re* Noll, 545 F.2d 141, 149, 191 USPQ 721, 727 (CCPA 1976) (unless the means-plus-function language is itself unclear, a claim limitation written in means-plus- function language meets the definiteness requirement in 35 U.S.C. 112, second paragraph, so long as the specification meets the written description requirement in 35 U.S.C. 112, first paragraph)... the invocation of 35 U.S.C. 112, sixth paragraph, does not exempt an applicant from compliance with 35 U.S.C. 112, first and second paragraphs. See *Donaldson*, 16 F.3d at 1195, 29 USPQ2d at 1850; *Knowlton*, 481 F.2d at 1366, 178 USPQ at 493.

Claims 8-29 and 51-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As set forth above, the rejected claims set forth various “means for” clauses. The specification as filed does not set forth specific structures for performing the means recited. The means all lack specific related structures in the specification. See MPEP 2181: 35 U.S.C. 112, sixth paragraph states that a claim limitation expressed in means-plus-function language “shall be construed to cover the corresponding structure...described in the specification and equivalents thereof.” “If one employs means plus function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112.” In *re* Donaldson Co., 16 F.3d 1189, 1195, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) (in banc). One of

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skill in the art would not necessarily be apprised of the specific structures to be used in the claimed apparatus.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites the limitation "means for adding elements to a stencil on said canvas or creating a stencil on said canvas by freehand sketching by the user" in reference to claim 8.

There is insufficient antecedent basis for this limitation in the claim. Claim 8 does not set forth a canvas, or a user.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-11, 18, 22, 23, 26-29, 54, 55, 56, 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Lett (US 2003/0009099).

Lett et al. discloses systems for modeling biological relationships. Lett discloses a system which comprises a processor, which is programmable and linked to a database (library) (0049) of modules (stencils) and a display (0015-0018, 0043-0045 etc). The processor is programmed to transform biological information into a format or abstract representation by populating the predesigned modules (stencils) with that information and displaying them (0047-

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0054 etc.). The module elements can be connected, edited, modified and new modules can be created, designed and saved (0051-0062, etc.) . The connected representations can be saved. The modules are reusable (0055, etc) . In Lett, it is the Solver Factory Object which provides the means for abstracting the biological information into a design pattern or module (0083). The modules can be distributed over a variety of servers, computers or platforms allowing multiple users. As such, Lett anticipates the rejected claims.

Claims 8-29 and 51-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Thalhammer-Reyero (US 5,930,154).

Thalhammer-Reyero discloses methods and systems for modeling the relationships in biological information. The system of thalhammer-Reyero comprises a programmed processor. Information of all kinds (text, graphics, icons) is used by the programmed processor to populate BioObjects, which are used to fill BioModels. These BioModels are the equivalent of the recited stencils: they are predefined graphical object that encapsulates a set of interrelated bioObjects representing sets of concurrent or sequential processes. They are reusable templates for biological information and abstractions which provide slots or layers for said information then provide means for linking the objects into predetermined relationships. (col 20-21) New relationships can be identified and connected. bioObjects can be modified, added, deleted, annotated etc (col 28). The bioObjects have qualitative and quantitative elements and parameters (col 4). The BioModel comprises expert rule systems for connecting bioObjects into a model (col 4 etc.). The behavior of the bioModel is defined by mathematical components represented by a variety of equations which can be graphical (col 5 etc.). Simple and complex bioModels are possible, depending on the level of the data and desired outcome (col 19-26, 29-33 etc). The

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bioModels can be overlaid on one another as for a simulation, or maintained separately. The “clone, transfer and configure” paradigm of Thalhaammer-Reyero provides the reusable, yet annotatable stencils of the claims (col 6 etc.). The databases and knowledge bases are integrated into the system which also comprises a programmed processor and a display.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 8-12 and 58 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 43-48 of copending Application No. 10/155616. Although the conflicting claims are not identical, they are not patentably distinct from each other because the systems of each application comprise 1) a processor, which is programmed to extract and transform biological information into a local format, 2) a database of

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stencils or existing pathway diagrams 3) means for selecting the pathways and assign data. As such, these systems are equivalent

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary K Zeman whose telephone number is (571) 272 0723

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjie Moran can be reached on (571) 272 0720. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

/Mary K Zeman/

Primary Examiner, Art Unit 1631